

# CHB150

## 75 TO 150 WATT WIDE INPUT DC-DC CONVERTERS SINGLE OUTPUT



### Features

- 75-150W Isolated Output
- Efficiency to 85%
- 500KHz Switching Frequency
- 2 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- Five-Sided Metal Case
- Industry Standard Half-Brick Package

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	CASE
CHB150-48S25		2.5 VDC	30A		2.6A	74	
CHB150-48S33		3.3 VDC	30A		2.6A	79	
CHB150-48S05		5 VDC	30A		3.7A	83	
	36-75 VDC			25 mA			HB
CHB150-48S12		12 VDC	12.5A		3.6A	85	
CHB150-48S15		15 VDC	10A		3.6A	85	
CHB150-48S24		24 VDC	6.25A		3.6A	85	

NOTE : 1. Nominal Input Voltage 48 VDC

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range..... 48V..... 36-75V  
 Undervoltage lockout ..... 48Vin power up ..... 34V  
 48Vin power down ..... 32.5V  
 Positive Logic Remote ON/OFF <sup>3,4</sup>  
 Input Filter ..... PI Type

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy : ..... ±1% max.  
 Transient Response :25% Step Load Change ..... <500µ sec.  
 External Trim Adj. Range ..... ±10%  
 Ripple & Noise, 20MHz BW, 2.5V & 3.3V & 5V ..... 40mV RMS, max.  
 12V & 15V ..... 100mV pk-pk, max.  
 60mV RMS, max.  
 150mV pk-pk, max.  
 24V ..... 100mV RMS, max.  
 240mV pk-pk, max.  
 Temperature Coefficient..... ±0.03%/°C  
 Short Circuit Protection..... Continuous  
 Line Regulation<sup>1</sup> ..... ±0.2% max.  
 Load Regulation<sup>2</sup> ..... ±0.2% max.  
 Over Voltage Protection trip Range, % Vo nom. .... 115-140%  
 Current Limit ..... 110% ~140% Nominal Output

#### GENERAL SPECIFICATIONS:

Efficiency..... See Table  
 Isolation Voltage ..... Input/Output..... 1500VDC min.  
 Input/Case..... 1500VDC min.  
 Output/Case..... 1500VDC min.  
 Isolation Resistance ..... 10<sup>11</sup> ohm min.  
 Switching Frequency ..... 500KHz, Typ.  
 Operating case Temperature ..... -40°C to 100°C  
 Storage Temperature ..... -40°C to +105°C  
 Thermal Shutdown, Case Temp. .... 100°C Typ.  
 Dimensions ..... 2.28x2.40x0.50 inches  
 (57.9x61.0x12.7 mm)  
 Case Material ..... Aluminum

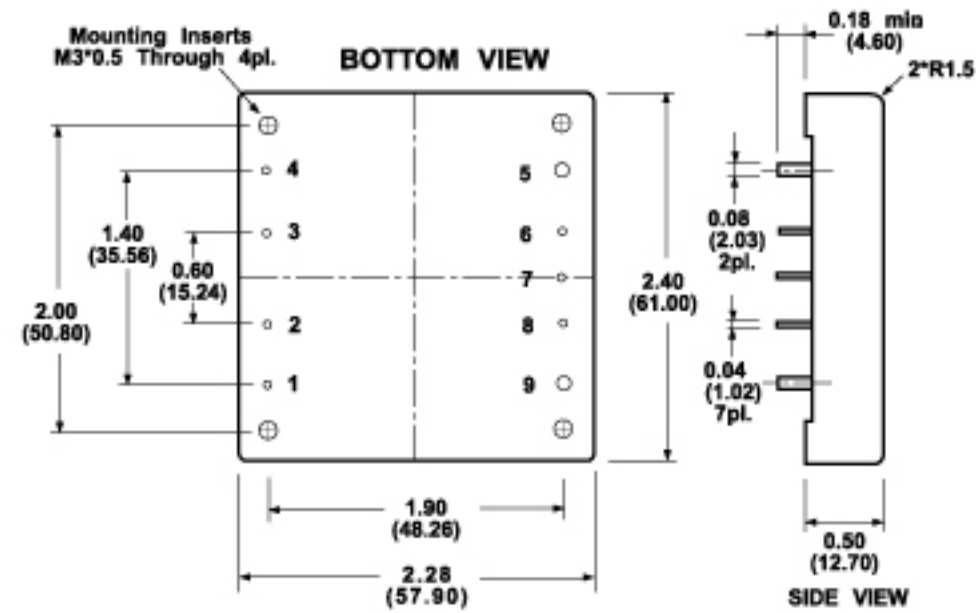
#### NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to Zero Load.
3. Logic Compatibility ..... Open Collector Ref. to -Input  
 Module ON ..... Open Circuit  
 Module OFF ..... < 0.8Vdc
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF.

### CASE HB

All Dimensions in Inches(mm)

Tolerances	Inches	XX±.02	.XXX±.010	Pin ±0.02
	Millimeters	.X±.5	.XX±.25	±0.5



Pin	unction
1.	+Vin
2.	ON/OFF
3.	CASE
4.	-Vin
5.	-Vout
6.	-Sense
7.	Trim
8.	+Sense
9.	+Vout

